AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Withdrawn) An oxide film forming apparatus, comprising:

a process chamber for disposing an electronic device substrate at a predetermined position;

water vapor supply means for supplying water vapor into the process chamber; and

plasma exciting means for activating the water vapor with plasma,

whereby the surface of the electronic device substrate can be irradiated with the plasma based on the water vapor.

2. (Withdrawn) An electronic device material, comprising:

an electronic device substrate having at least one trench, and

an oxide film covering a part of the surface of the electronic device substrate; the part containing at least one trench groove,

wherein, in the oxide film covering the trench groove, the ratio (T_{100}/T_{110}) of the thickness T_{100} of the oxide film disposed on the surface (100) of the electronic device material, to the thickness T_{110} of the oxide film disposed on the surface (110) of the electronic device material is 0.65 or larger.

3. (Currently amended) An oxide film-forming process, comprising:

exposing ~~the~~ a surface of an electronic device substrate with plasma in the presence of a process gas containing at least water vapor at a pressure of 6.67-266 Pa, so as to form an oxide film on the surface of the electronic device substrate.

4. (Original) An oxide film-forming process according to claim 3, wherein the oxide film is formed at a temperature of 500 °C or lower.

5. (Original) An oxide film-forming process according to claim 3 or 4, wherein the plasma is generated on the basis of microwave irradiation through a plane antenna member having a plurality of slits.

6. (New) An oxide film-forming process according to claim 3, wherein the process gas contains a rare gas, and the amount of the water vapor is 0.2 - 2 volume % with respect to the rare gas.

7. (New) An oxide film-forming process according to claim 6, wherein the rare gas is Kr, Ar, or He.

8. (New) An oxide film-forming process according to claim 3, wherein the plasma has an electron temperature of 1.5 eV or less.

9. (New) An oxide film-forming process according to claim 3, wherein the electronic device substrate is preheated before the plasma is ignited.

10. (New) An oxide film-forming process according to claim 9, wherein the electronic device substrate is preheated for a period of 30 seconds or more.

11. (New) An oxide film-forming process according to claim 3 or 10, wherein the electronic device substrate is washed before the plasma processing thereof.

12. (New) A plasma processing process, wherein a surface of an electronic device substrate having at least one groove on the surface thereof is exposed with plasma based on H_2O, so as to oxidize the surface of the electronic device substrate and to form an oxide film on the surface thereof; the process comprising:

introducing the electronic device substrate into a process chamber, so as to dispose the electronic device substrate on a stage;

heating the electronic device substrate with heating means;

generating the plasma based on H_2O in the process chamber; and

exposing the surface of the electronic device substrate with the plasma based on H_2O, so as to form an oxide film on the groove thereof.

13. (New) A plasma processing process according to claim 12, wherein the electronic device substrate is a silicon substrate having a crystal plane orientation.

14. (New) A plasma processing process according to claim 12 or 13, wherein a bottom of the at least one groove has a first crystal plane orientation, and a side of the at least one groove has a second crystal plane orientation.

15. (New) A plasma processing process according to claim 14, wherein the oxide film is formed on the at least one groove, so as to provide a ratio (T_{100}/T_{110}) of the thickness T_{100} of the oxide film disposed on a first surface of the electronic device substrate, to the thickness T_{110} of the oxide film disposed on a second surface of the electronic device substrate is 1.

16. (New) A plasma processing process according to claim 15, wherein the H_2O is generated by using a water vapor generator from H_2 and O_2, or by converting pure water into water vapor.

17. (New) A plasma processing process according to claim 12, wherein the plasma based on H_2O is generated by introducing H_2 gas and O_2 gas into the process chamber, and by using plasma generation means.

18. (New) A plasma processing process according to claim 16, wherein the plasma based on H_2O contains plasma based on a rare gas, and the amount of the H_2O is 0.2 - 2 volume % with respect to the rare gas.

19. (New) A plasma processing process according to claim 12, wherein the plasma has an electron temperature of 1.0 eV or less.

20. (New) A plasma processing process according to claim 12, wherein the plasma is generated on the basis of microwave irradiation through a plane antenna member having a plurality of slits.

21. (New) A plasma processing process according to claim 12, wherein the electronic device substrate is preheated before the ignition of the plasma.

22. (New) A plasma processing process according to claim 21, wherein the preheating is effected for 30 seconds or more.

23. (New) A plasma processing process according to claim 12, wherein the groove is an STI groove.

24. (New) A plasma processing process according to claim 18, wherein the rare gas is Kr, Ar, or He.

25. (New) A plasma processing process according to claim 12, wherein the pressure in the process chamber is 6.67- 266 Pa.

26. (New) A plasma processing process according to claim 12 or 17, wherein the plasma based on H_2O contains plasma based on a rare gas, and the rare gas is Kr, Ar, or He.

27. (New) A plasma processing process, wherein a surface of an electronic device substrate is exposed with plasma based on a process gas comprising H_2O, so as to oxidize the surface of the electronic device substrate and to form an oxide film on the surface thereof; the process comprising:

cleaning the surface of the electronic device substrate;

introducing the electronic device substrate after the washing into a process chamber, so as to dispose the electronic device substrate on a stage;

preheating the electronic device substrate with heating means;

generating the plasma based on H_2O in the process chamber, while heating the electronic device substrate; and

exposing the surface of the electronic device substrate with the plasma based on H_2O, so as to form an oxide film on the surface of the electronic device substrate.

28. (New) A plasma processing process according to claim 27, wherein the pressure in the process chamber is 6.67-266 Pa.

29. (New) A plasma processing process according to claim 27, wherein the H_2O is generated by using a water vapor generator from H_2 and O_2, or by converting pure water into water vapor.

30. (New) A plasma processing process according to claim 27, wherein the plasma based on H_2O contains plasma based on a rare gas, and the rare gas is Kr, Ar, or He.

31. (New) A plasma processing process according to claim 27, wherein the preheating is effected for 30 seconds or more.

32. (New) A plasma processing process according to claim 29, wherein the plasma based on H_2O contains plasma based on a rare gas, and the amount of the water vapor is 0.2-2 volume % with respect to the rare gas.

33. (New) A plasma processing process according to claim 27, wherein the surface of the electronic device substrate has a groove.